

## **THE SAFE PILOT'S 12 GOLDEN RULES - FAA-P-8740-7**

These "12 Golden Rules" were developed from insurance company files and aircraft accidents. They provide sound guidelines for safe operating practices.

### **1. CHECK-OUT—Plan ahead . . .**

Never fly an aircraft until you have been checked out by a qualified instructor and have completed a minimum of:

- (a) One hour ground familiarization with controls/systems and aircraft operating limitations.
- (b) Eight regular takeoffs and landings (day or night).
- (c) Two cross-wind takeoffs and landings.
- (d) Two short field takeoffs and landings.
- (e) Repeat above if no recent experience this model (6 months).

### **2. AIRCRAFT PRE-FLIGHT—Plan ahead . . .**

Never start until you have:

- (a) Checked weight and balance data.
- (b) Determined that all objects in the cabin are secure and free of the controls.
- (c) Completed "walk around" pre-flight inspection.
- (d) Determined that you have enough fuel on board for your flight . . . plus 15 minutes for takeoff and 45 minutes at destination.

### **3. VIGILANCE—Plan ahead . . .**

When at the controls, never proceed into an area on the ground or in the air without double checking for existing or potential hazards visually and by any other means available.

### **4. CONTROLS AND SYSTEMS—Plan ahead . . .**

- (a) Never operate an aircraft unless you are thoroughly familiar with the operation and correct use of all controls and systems.
- (b) Never start engine, takeoff, cruise, letdown, or land until all prescribed procedures are accomplished from a checklist.
- (c) Never operate an aircraft with a known malfunction, if malfunction occurs in flight, land at nearest airport.
- (d) When flying retractable gear aircraft, never raise flaps on landing roll. Wait until well clear of active runway, then double check the control you are activating.
- (e) Learn conditions conducive to the formation of carburetor ice. Stay alert for this hazard, and use carburetor heat at the first indication of icing.

### **5. WEATHER—Plan ahead . . .**

- (a) During pre-flight—Get a thorough weather briefing. Establish clearly in your mind the current enroute conditions, the enroute forecast, and the "escape route" to good weather.

(b) In flight—Never risk losing good ground reference control. When encountering 1,000 feet or 5 miles make plans for possible retreat to alternate airport. When encountering 800 feet or less than 3 miles execute these plans immediately.

(c) On top—Never fly above clouds unless they are widely scattered, and then only provided there is at least 2,000 feet from the highest ground to cloud base.

(d) At night—Never attempt a night flight unless you're sure you'll have a 2,000 foot ceiling and 5 miles visibility and will encounter no frontal fog, ground fog or storm conditions.

\* Items (b), (c) and (d) do not apply if pilot is current and qualified for IFR.

## **6. SPEED/STALL CONTROL—Plan ahead . . .**

Never abruptly change the attitude of an airplane nor allow its airspeed to drop below:

- (a) At least 160% of stall speed when maneuvering below 1,000 feet.
- (b) At least 140% of stall speed during straight approach or climb out.
- (c) At least 130% of stall speed over threshold and ready for touchdown.

## **7. NAVIGATION—Plan ahead . . .**

(a) Plan to reach destination one hour before sunset unless qualified and prepared for night flight.

(b) Never operate at an altitude less than 500 feet above the highest obstruction (2,000 feet in mountain area) except on straight climb from takeoff or straight-in approach to landing.

(c) Predetermine "E.T.A." over all check points. If lost, never deviate from original course until oriented. Always hold chart so plotted course coincides with flight path.

(d) Divert to nearest airport if periodic fuel check indicates you won't have 45 minutes reserve at destination.

## **8. TAKEOFF/LANDING AREA—Plan ahead . . .**

(a) Never take off or land unless on designated airports with known, current runway maintenance.

(b) Be sure the runway length is equal to aircraft manufacturer's published takeoff or landing distance plus . . . 80% safety margin if hard surface, double the manual distance if sod, and triple the manual distance if wet grass (about same traction as ice).

(c) After dark use only well lighted night operated airports, and then use steeper approach to clear unlighted obstacles.

## **9. TAKEOFF/LANDING LIMITS—Plan ahead . . .**

(a) Always plan touchdown 200 feet inside of runway threshold.

(b) Abort takeoff if not solidly "airborne" in first 1/2 of runway.

(c) Abort landing if not solidly "on" in first 1/3 of runway. (First 1/4 if wet grass.)

(d) Never relax control until engine is shut down and wheels are blocked.

## **10. WIND LIMITS—Plan ahead . . .**

(a) Never attempt taxiing when crosswinds or gusts exceed 50% of stall speed unless outside assistance is used. Taxi very slowly when winds exceed 30% of stall speed.

(b) Never attempt takeoff or landing when 90° surface crosswinds exceed 20% of stall speed, or 45° surface winds exceed 30% of stall speed. (Review CAP crosswind limitations)

(c) Never taxi closer than 1,000 feet from "blast" end of powerful aircraft, and then only when headed into remaining blast effect.

(d) Never follow a powerful aircraft on takeoff, in the air, or on landing without allowing time for turbulence to subside.

## **11. PHYSICAL CONDITION—Plan ahead . . .**

Never attempt to pilot an aircraft if:

- (a) Less than 24 hours have elapsed since drinking alcoholic beverages.
- (b) You are extremely fatigued.
- (c) You are taking tranquilizing or sleep-inducing drugs.
- (d) You are emotionally upset.
- (e) You are hypoxic from oversmoking, or from operating above 10,000 feet without oxygen.

## **12. STARTING ENGINE—Plan ahead . . .**

(This section modified from original document which gives procedures for hand-propping an aircraft which is prohibited for CAP operations). CAP members will never attempt to hand start an aircraft engine. If a battery is discharged it must be recharged properly.

**PLAN AHEAD!**

**DON'T TRUST TO LUCK—TRUST TO SAFETY**